

REMARKS

After entry of this amendment, claims 1, 5, 8-11, 13, 15, 18, 19, 21, 25, 29, 32, 34, 41, 45, 47 and 49 are pending. Claims 1, 29 and 34 have been amended without prejudice or disclaimer. Support is found in the specification *inter alia* at page 9, lines 7 and 8. No new matter has been added.

In response to the restriction requirement set forth in the Office Action mailed October 3, 2006, Applicants provisionally elect Group I, claims 1, 5, 8-11, 13, 15, 18-19, 29, 32, 47 and 49, and the sequence of SEQ ID NO: 3, with traverse. Applicants respectfully traverse and strongly urge reconsideration and withdrawal of the restriction requirement for the following reasons.

The Claimed Inventions Share a Special Technical Feature

Because this application is a national stage filing pursuant to 35 U.S.C. § 371, unity of invention under PCT Rule 13.1 and 13.2 is the applicable standard. Unity of invention is fulfilled “when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical feature. The expression ‘special technical feature’ shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.” (PCT Rule 13.2).

The Examiner states that the inventions of Group I-XXXIV do not relate to a “special technical feature” which defines a contribution over the prior art, citing Gupta et al. (PNAS, 1993, 90:1629-1633) and Foyer et al. (Plant Physiol., 1995, 109:1047-1057). Applicants respectfully disagree.

As stated in the specification, the object of the present application relates to Oxidoreductase Stress-Related Proteins (ORSRP) and their application in modulating tolerance and resistance to environmental stress in transgenic plants. Preferably, the tolerance and resistance to environmental stress is modified by modulating the expression of ORSRP in plants. Furthermore, as amended, the ORSRP according to the present invention is a heat-stable glutaredoxin or thioredoxin protein. Thus, the general inventive concept of the present application can be briefly summarized as relating to a nucleic acid encoding a glutaredoxin or thioredoxin protein and the use thereof in modulating tolerance and resistance to environmental stress of a plant by manipulating the expression of such a nucleic acid.

Both references cited by the Examiner, Gupta et al. and Foyer et al., teach genetically engineered plants and mention improvement of stress tolerance. However, neither reference teaches or suggests a heat-stable glutaredoxin or thioredoxin protein. Nor does either reference teach or suggest that manipulating the expression of a heat-stable glutaredoxin or thioredoxin protein can modulate tolerance and/or resistance to environmental stress in a plant.

Accordingly, the inventive concept as described above (“special technical feature”) is shared by all of the claims of Groups I to XXXIV. For instance, over-expression of a nucleic acid encoding a glutaredoxin or thioredoxin protein, including those described in Restriction Groups XXVI-XXXII, in a plant leads to the production of the transgenic cells and plants within the scope of claims of Restriction Groups I-XXV. Additionally, the modification of the gene expression of such a glutaredoxin or thioredoxin encoding nucleic acid is achieved by the methods of Restriction Groups XXXIII and XXXIV. Therefore, these claims should be considered together based on unity of invention, and could be examined together with minimal burden.

Furthermore, Applicants respectfully submit that the restriction requirement should be withdrawn even under restriction practice. As stated in § 803 of the M.P.E.P. “[i]f the search and examination of the entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.” (M.P.E.P. § 803, emphasis added). The same art relevant to a glutaredoxin or thioredoxin protein would also be relevant to a method of using it in modifying tolerance and/or resistance to environmental stress in a genetically modified plant. There would be no undue burden on the Examiner to search and examine all Groups together, since the subject matter of the various groups is so closely linked and would be classified together for search.

CONCLUSION

For at least the above reasons, Applicants respectfully request that the restriction requirement be reconsidered and withdrawn.

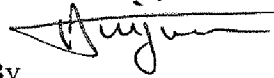
Applicants are submitting their response herewith within the one-month response period. Applicants believe that no fee is due. However, if an additional fee is due, the Director is

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authorized to charge our Deposit Account No. 03-2775, under Order No. 13311-00012-US from which the undersigned is authorized to draw.

Respectfully submitted,



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